Renewable Energy Massachusetts

September 9, 2009

As a renewable investment and project development business that aims to be among those building solar generation projects in Massachusetts in the years ahead, Renewable Energy Massachusetts is grateful for the opportunity to share our responses to the Solar-RPS "Straw Proposal" that Dwayne Breger presented at the DOER conference on August 26th. We applaud the efforts of the entire DOER team in their thoughtful initial proposal. While we hope that the DOER will be successful in completing the Solar-RPS ("S-RPS") regulations for an early 2010 launch, we join those parties that would prefer that this process take the necessary time to develop a well-constructed, durable program that has widespread support and provides the reliable, long-term structure needed to finance solar projects.

NOTE: page references are to the 8/26/09 DOER "Straw Proposal" PowerPoint

1. Explicitly Limit Solar-RPS Compliance to the Purchase of S-RECs, Not Utility Owned Solar Generation (p.9)

We are very concerned that the four Massachusetts Distribution Companies, which are *each* presently authorized under Massachusetts law to own and operate up to 50MW of solar generation systems, will utilize their favorable credit ratings and access to capital (and flexible rate-payer reimbursement structure) to profitably develop and own large amounts of solar generation in Massachusetts and end up having minimal, if any, need to purchase S-RECs.

Given the Distribution Companies' inherent financing advantages, we believe there is a significant risk that unless the S-RPS program requires them to buy S-RECs, the Distribution Companies will not buy S-RECs and instead will build considerably more than the 23MW of internally-owned solar generation estimated by the DOER on page 9 for years 2012 through 2020.

Given the inherent uncertainty of the competitive impact on S-REC demand caused by Distribution Companies' ownership of solar facilities, we respectfully urge the DOER to make it explicit that, irrespective of whatever solar generation facilities the Distribution Companies may own independently, they can only satisfy their Solar RPS Minimum Standard each year through S-RECs (or the S-ACP).

The result of such an explicit disaggregation would be greater certainty of demand for S-RECs and a willingness of banks to rely upon S-RECs as a foundation upon which to lend into solar construction projects. To reiterate, though, a limitation of S-RPS compliance to S-RECs would not remove the right of the Distribution Companies to own independent solar facilities or to generate RECs (as distinct from S-RECs); they just couldn't use those facilities' output to create S-RECs or satisfy their S-RPS obligations.

2. Increase Early-Year Solar RPS Obligations to Drive Rapid Solar Development (p.9) We believe that the Massachusetts solar industry should be given every incentive to rapidly deploy PV solar systems now in order put Massachusetts on the path to its larger, long-term goals. We recommend achieving this goal by increasing the Year 2010 Solar RPS obligation to 12MW, the Year 2011 *cumulative obligation* to 28MW, and the Year

2012 *cumulative obligation* to 48MW (and then adjusting the subsequent years as necessary to achieve the long-term goals of the S-RPS program). We note, by comparison, that in the 8/26/09 draft, the DOER only calls for 1MW of new S-REC financed systems built in 2011 (bringing the *cumulative* total to 4MW), which is a paltry goal and represents a negative growth rate compared to an already low 3MW target in 2010.

To the extent the DOER is concerned about the ability of the Massachusetts Solar Industry to actually deploy 48MW by the end of 2012 (and the risk of penalizing the Distribution Companies for insufficient Solar REC purchases that prove not, in fact, to be available for purchase), the DOER could structure a backstop provision under which the Distribution Companies would not be charged an S-ACP penalty to the extent they can prove insufficient S-RECs were offered to third party-operated auctions and markets during the early compliance years.

3. Make the Long-Term Solar RPS Goal Explicit (p. 9 & p.12)

Renewable Energy Massachusetts encourages the DOER to state explicitly what its ultimate Solar RPS goal is -- such as 2% of total electricity by the year 2025 and continuing thereafter -- so that there is greater certainty in the Massachusetts solar marketplace about the long-term direction of the market and the quantities of S-RECs that will be demanded and purchased. Greater S-REC certainty will, in turn, increase solar developers' confidence in the Massachusetts solar market and, simultaneously, ease solar project financing challenges.

4. Introduce Rolling 10-year S-RPS Compliance Windows (p.12)

We believe that if the Solar RPS obligations for the years 2021 and beyond are not established in the early stages of the program, there will be little or realistically no incentive for Distribution Companies to enter into long-term S-REC purchase and sale contracts. For example, under the straw proposal, if in the year 2012 a Distribution Company were looking ahead at its future S-RPS obligations and did not see any requirement to purchase a set amount of S-RECs for the years 2021 and 2022, it would have no incentive to enter into a ten (10) year S-REC purchase contract in 2012 with any solar generators. Instead, it would logically enter into a nine (9) year (or shorter duration) contract that would run through its final known obligation year of 2020. We believe such a result would produce a terrible and unnecessary defeat of the S-RPS program goals: Namely, to support long-term bank financing through long-term S-REC sale contracts.

Therefore, instead of waiting until the year 2015 to announce the years 2021-25 Solar RPS obligation, as is suggested on page 12, we respectfully ask the DOER to accelerate its future S-RPS and S-ACP announcement schedule such that at any point in time there will always be a publicly announced, 10-year forward S-RPS obligation path known in the marketplace (in other words, a Rolling 10-Year S-RPS Compliance Window).

5. Be Generous with the S-ACP: The Massachusetts Solar Industry's Development Depends on It (p.12).

We strongly support the S-ACP rates shown in draft form on page 12 of the Straw Proposal. We encourage the DOER to remain generous throughout its S-REC rulemaking process and to take encouragement from other jurisdictions that have recognized the need for solar-specific stimulus. We note, for example, that the Canadian

province Ontario recently approved during 2009 a solar feed-in tariff equal to approximately 42 cents (U.S.) per KwH.

The size and context of the proposed S-REC program is also important. Assuming that 250 MW of solar were built by 2017 (with a 13% average capacity factor), the Massachusetts solar projects would produce approximately 300 million Kilowatt Hours of electricity each year. At a hypothetical S-REC rate of $400 per MWh (or 40 cents per KWh), the total S-REC program cost at 250MW of installed solar would equal $120 million each year. In contrast, the 51 billion KwH of electricity sold by the Distribution Companies each year (at present consumption rates), at an assumed retail generation rate of 12 cents per KwH, cost a total of approximately $6.1 billion. In other words, the S-REC program in the early years would add a modest 2% additional cost to electricity rates in Massachusetts, or approximately 24-hundredths of a cent per KWh for the average rate payer. Over time, that subsidy would be reduced.

6. We Strongly Support Long-Term Securitization of S-RECs as a Means to Facilitate Bank Financing of Solar Generation in Massachusetts (p.13)

Without long-term visibility on revenues, banks (particularly New England regional banks that have not lent significant amounts to develop 1-2MW scale solar generation) will shy away from financing solar generation projects as too risky in the current economic climate. As a result, we conclude that there is a need for long-term securitization to support bank financing.

In contrast to the comments of Brightpath Energy that question the viability of a centralized market clearinghouse for long-term S-RECs, we conclude that the Distribution Companies would aggressively participate in such a marketplace if they were obligated by the DOER's regulations to enter into long-term S-REC purchase contracts. The DOER should coordinate such authority with the DPU to compel the Distribution Companies to purchase substantial percentages of their S-RECs through the proposed 10-year S-REC securitization market and to make annual, publicly available compliance reports on such purchases simultaneous with their similarly public S-RPS compliance reports.

7. The DOER Should Educate & Encourage Regional New England Banks to Finance Solar Projects (p.13).

Because Massachusetts has not developed larger scale 1-2MW solar projects, few if any of the regional banks have experience underwriting large $5-10 million loans for solar projects. Those banks that do specialize in solar and other renewables often exclude installations smaller than 10MW and $50-60 million in loans because the banks' considerable transaction and professional costs cannot economically be supported by the smaller projects. Given the limitation of the S-REC program to projects less than 2MW, it is reasonable to expect that many of the larger renewable lenders will therefore avoid the Massachusetts solar marketplace.

Consequently, in order to overcome the predictable caution of smaller regional banks to finance solar generation projects in Massachusetts, we encourage the DOER to convene independent, government-led educational conferences drawing upon the experience of other solar-intensive regions and federal scientific resources to detail the realistic energy production, revenue capacity, technology history, development risks and mitigations, and other considerations in financing solar in Massachusetts.

8. Consider a Solar Loan Program Akin to New Jersey (p.13 & p.6).

Even with long-term S-REC securitization, it may remain difficult for solar projects to obtain bank financing. To overcome this roadblock, the DOER might consider emulating the New Jersey Solar Loan Program, which is described in the following paragraph taken from the New Jersey DPU website:

> Under PSE&G's Solar Loan Program, approved by the New Jersey Board of Public Utilities (BPU) in 2008, the company is investing $105 million over two years to help finance the installation of 30 MW of solar systems for businesses and homeowners. The commercial and industrial segment of the program is fully subscribed at 28 MW and the utility has submitted an application to the BPU to expand the program by an additional 40 MW. To date, loans totaling $10.5 million for 2.8 MW of solar capacity have closed and are in service.

Given the significant capital resources and favorable credit ratings of the Massachusetts Distribution Companies, we believe there are significant savings (in the form of low-cost debt capital) that the Distribution Companies could pass on to third party solar generation projects. One form of a Solar Loan Program would call for the utilities to be a seed lender to encourage other loan participants. In return, the Distribution Companies would realize acceptable returns on investment from their project loans and would presumably receive the benefit of lower-cost S-RECs derived from lower-cost projects. As further support for this concept, we note that in comparison to less experienced regional lenders, the Distribution Companies are in both a strong capital and more advanced solar risk-knowledge position to lend into solar projects on an expedited basis.

9. Develop a Simplified Model S-REC Purchase and Sale Agreement (Not in DOER PowerPoint)

With all due respect for the abilities and financial resources of the lawyers working on behalf of the Distribution Companies, smaller generators are wary of negotiating complex S-REC securitization contracts that would effectively bury generators in substantial legal fees that would unnecessarily burden the financial models of smaller generation projects. The DOER should, in consultation with stakeholders, generate a model or form S-REC contract that is relatively short and simple. In the end, verified S-RECs certified by the GIS will diffuse most concerns of the S-REC purchasers.

10. Effective Dispute Resolution at the DOER (Not in DOER PowerPoint)

Any large, vibrant marketplace will produce its share of disputes. We submit that the absence of prompt, efficient dispute resolution is a much bigger risk factor for smaller generators than it is for large Distribution Companies. We respectfully suggest that the DOER, as the state agency with the greatest subject matter expertise, might beneficially lend its offices to afford timely dispute resolution surrounding S-REC purchase and sale contracts and transactions.

Renewable Energy Massachusetts reiterates our strong support for the DOER's efforts in crafting a durable, long-term Solar-RPS system for successful launch in early 2010 and look forward to continued participation in the process this fall. Thank you for the opportunity to share our comments.

Respectfully submitted,

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